CLAIMS

- 1. A polycarbonate copolymer (A) which comprises an aromatic dihydroxy component,
- 5 the aromatic dihydroxy component comprising 5 to 95 mol% of fluorene-skeleton-containing dihydroxy compound (1) represented by the following general formula [1]:

$$R^3$$
 R^4
 R^2
 R^4
 R^3
 R^4

(wherein R¹ to R⁴ are each independently a hydrogen atom, a hydrocarbon group with 1 to 9 carbon atoms which may contain an aromatic group, or a halogen atom.), and 95 to 5 mol% of dihydroxy compound (2) represented by the following general formula [2]:

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$$HO = \begin{vmatrix} B^5 \\ B^7 \end{vmatrix} = \begin{pmatrix} B^6 \\ B^8 \end{vmatrix}$$

(wherein R^5 to R^8 are each independently a hydrogen atom, a hydrocarbon group with 1 to 9 carbon atoms which may contain an aromatic group, or a halogen atom, and W is a single bond, a hydrocarbon group with 1 to 20 carbon atoms which may contain an aromatic group or an O, S, SO, SO₂, CO or COO group.), the content of fluorene-9-one in the polycarbonate copolymer being not higher than 15 ppm.

- 2. The copolymer of claim 1, wherein the content of fluorene-9-one in the polycarbonate copolymer is not higher than 5 ppm.
- 3. The copolymer of claim 1, comprising an aromatic dihydroxy component comprising 15 to 85 mol% of the fluorene-skeleton-containing dihydroxy compound represented by the general formula [1] and 85 to 15 mol% of the dihydroxy compound (2) represented by the general formula [2].

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- 4. The copolymer of claim 1, wherein the fluorene-skeleton-containing dihydroxy compound represented by the general formula [1] is
- 9,9-bis(4-hydroxyphenyl)fluorene or
- 15 9,9-bis(4-hydroxy-3-methylphenyl)fluorene.
 - 5. The copolymer of claim 1, wherein the dihydroxy compound represented by the general formula [2] is at least one selected from the group consisting of
- 20 2,2-bis(4-hydroxyphenyl)propane,
 - 2,2-bis(4-hydroxy-3-methylphenyl)propane,
 - α,α'-bis(4-hydroxyphenyl)-m-diisopropylbenzene and
 - 1,1-bis(4-hydroxyphenyl)cyclohexane.
- or less when a solution prepared by dissolving 5 g of the copolymer in 50 ml of methylene chloride in a light blocking condition is measured at an optical path length of 30 mm.
- 7. The copolymer of claim 1, having a sulfur compound content of not higher than 50 ppm in terms of sulfur atom.
 - 8. The copolymer of claim 1, having a chlorine content of not higher than 10 ppm based on terminal chloroformate

groups and a terminal hydroxyl group (OH) content of not higher than 250 ppm of the copolymer.

- 9. A production method of the polycarbonate copolymer of claim 1, comprising subjecting the fluorene-skeleton-containing dihydroxy compound (1) represented by the general formula [1] and the dihydroxy compound (2) represented by the general formula [2] to a polymerization reaction in an organic solvent in the presence of phosgene and an acid binding agent, wherein the polymerization reaction is carried out substantially in the absence of molecular oxygen.
 - 10. A polycarbonate composition comprising:
- A) 100 parts by weight of polycarbonate copolymer (A), and B) 0.01 to 5 parts by weight of ultraviolet absorber (B), the polycarbonate copolymer (A) comprising an aromatic dihydroxy component,

the aromatic dihydroxy component comprising 5 to 95 mol% of fluorene-skeleton-containing dihydroxy compound (1) represented by the following general formula [1]:

$$R^3$$
 R^4
 R^2
 R^4
 R^4

(wherein R¹ to R⁴ are each independently a hydrogen atom, a 25 hydrocarbon group with 1 to 9 carbon atoms which may contain an aromatic group, or a halogen atom.), and 95 to 5 mol% of dihydroxy compound (2) represented by the following general formula [2]:

$$HO = \begin{bmatrix} R^5 \\ R^5 \\ R^7 \end{bmatrix} W \longrightarrow \begin{bmatrix} R^6 \\ R^6 \\ R^7 \end{bmatrix} W \longrightarrow \begin{bmatrix} R^6 \\ R^6 \end{bmatrix}$$

(wherein R^5 to R^8 are each independently a hydrogen atom, a hydrocarbon group with 1 to 9 carbon atoms which may contain an aromatic group, or a halogen atom, and W is a single bond, a hydrocarbon group with 1 to 20 carbon atoms which may contain an aromatic group or an O, S, SO, SO₂, CO or COO group.), the content of fluorene-9-one in the polycarbonate copolymer being not higher than 15 ppm.

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11. The composition of claim 10, wherein the ultraviolet absorber (B) is uniformly dispersible in the polycarbonate copolymer (A) and is stable under melt molding conditions of the copolymer (A).

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- 12. The composition of claim 10, wherein when an amount of change in Yellow Index (YI) after a 2-mm-thick molded plate formed from the polycarbonate copolymer (A) is exposed to a mercury lamp of 300 to 400 nm with an exposure intensity of 15 mW/cm² for 7 days is Δ YI₀, a change in Yellow Index after a 2-mm-thick molded plate formed from the polycarbonate resin composition comprising the polycarbonate copolymer (A) and the ultraviolet absorber (B) is exposed to a mercury lamp of 300 to 400 nm with an exposure intensity of 15 mW/cm² for 7 days is Δ YI₁, and the degree (R_{YI}) of light resistance improving effect by the ultraviolet absorber (B) is expressed as R_{YI} = (1 Δ YI₁/ Δ YI₀) × 100 (%), R_{YI} \geq 50% holds.
 - 13. The composition of claim 10, wherein the

ultraviolet absorber (B) is an ultraviolet absorber showing an absorbance (A_{360nm}) at 360 nm measured at an optical path length of 1 cm of not lower than 0.5 when dissolved in methylene chloride at a concentration of 10 mg/L and an absorbance (A_{400nm}) at 400 nm measured at an optical path length of 1 cm of not higher than 0.01 when dissolved in methylene chloride at a concentration of 10 mg/L.

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- 14. The composition of claim 10, wherein when the glass transition temperature of the polycarbonate composition containing 2 parts by weight of the ultraviolet absorber (B) based on 100 parts by weight of the polycarbonate copolymer (A) is Tg' and the glass transition temperature of the polycarbonate copolymer (B) containing no ultraviolet absorber (B) is Tg, Tg is 150°C or higher and satisfies Tg Tg' ≤ 5°C.
 - 15. The composition of claim 10, wherein the ultraviolet absorber (B) is a benzotriazole, benzophenone, triazine or benzoxazine based ultraviolet absorber.
 - 16. The composition of claim 10, wherein the ultraviolet absorber (B) is a benzoxazine based ultraviolet absorber represented by the following general formula [3]:

25 (wherein R⁹ to R¹¹ each independently represent a hydrogen atom, a hydrocarbon group with 1 to 9 carbon atoms which may contain an aromatic hydrocarbon group or a halogen atom, Ar represents

a q-valent aromatic hydrocarbon group having 6 to 15 carbon atoms, and q represents an integer of 1, 2 or 3.)

- 17. A molded article formed from the polycarbonate 5 copolymer (A) of claim 1.
 - 18. A film or sheet formed from the polycarbonate copolymer (A) of claim 1.
- 19. A molded article formed from the polycarbonate composition of claim 10.
 - 20. A film or sheet formed from the polycarbonate composition of claim 10.

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- 21. A light-proof molded article comprising a molded article formed from the polycarbonate copolymer (A) of claim 1 and a layer comprising a polymer composition containing an ultraviolet absorber, the layer being formed on the molded article.
- 22. A composite film or sheet comprising a film or sheet formed from the polycarbonate copolymer (A) of claim 1 and a layer comprising a polycarbonate composition containing an ultraviolet absorber, the layer being laminated on one or both surfaces of the film or sheet.
- 23. A light diffusing plate formed from a polycarbonate composition comprising 99.7 to 80 parts by weight of the polycarbonate copolymer (A) of claim 1 and 0.3 to 20 parts by weight of transparent fine particles.
- 24. The light diffusing plate of claim 23, wherein the polycarbonate composition further contains 0.01 to 5 parts

by weight of the ultraviolet absorber (B) based on 100 parts by weight of the polycarbonate copolymer (A).

- 25. The light diffusing plate of claim 23, wherein the polycarbonate composition further contains 0.0005 to 0.1 parts by weight of fluorescent brightening agent based on 100 parts by weight of the polycarbonate copolymer (A).
- 26. The light diffusing plate of claim 23, wherein the transparent fine particles have an average particle diameter of 1 to 30 μm .